THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

PERSONALWEB TECHNOLOGIES, LLC, et al.,	§ § §	
Plaintiffs,	§ § §	
v.	§ §	CASE NO. 6:12-CV-661-JRG
	§	(LEAD CASE)
INTERNATIONAL BUSINESS MACHINES CORPORATION,	§ § § §	
Defendant.	§ §	
_____	§ §	
PERSONALWEB TECHNOLOGIES, LLC, et al.,	§ § §	
Plaintiffs,	§ § §	
v.	§ §	CASE NO. 6:12-CV-659-JRG
	§	(CONSOLIDATED CASE)
RACKSPACE US, INC., et al.,	§ §	
Defendants.	§	

<u>MEMORANDUM OPINION AND ORDER</u>

Before the Court are Plaintiff PersonalWeb Technologies, LLC's Opening Claim Construction Brief (Dkt. No. 85), Defendants' response (Dkt. No. 90), and Plaintiff's reply (Dkt. No. 94).

The Court held a claim construction hearing on March 7, 2016.

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I. BACKGROUND

Plaintiff brings suit alleging infringement of United States Patents No. 6,415,280 ("the '280 Patent"), 6,928,442 ("the '442 Patent"), 7,802,310 ("the '310 Patent"), and 8,099,420 ("the '420 Patent") (collectively, "the patents-in-suit"). (Dkt. No. 85, Exs. A-D.) The remaining Defendants are International Business Machines Corporation and GitHub, Inc.

The patents-in-suit are related to United States Patent No. 5,978,791 ("the '791 Patent") (*id.*, Ex. E), which is no longer asserted in the present case. The parties submit that "[a]lthough the '791 patent is no longer asserted, the parties cite to the '791 patent because its specification is identical to the specifications of the asserted patents and because the Court cited to the '791 patent specification when previously construing terms from the asserted patents." (Dkt. No. 78, Ex. B at 1.)

The '791 Patent, titled "Data Processing System Using Substantially Unique Identifiers to Identify Data Items, Whereby Identical Data Items Have the Same Identifiers," issued on November 2, 1999, and bears an earliest priority date of April 11, 1995. The Abstract states:

> In a data processing system, a mechanism identifies data items by substantially unique identifiers which depend on all of the data in the data items and only on the data in the data items. The system also determines whether a particular data item is present in the database by examining the identifiers of the plurality of data items.

The Court previously construed terms in the patents-in-suit in *PersonalWeb Technologies, LLC v. NEC Corp., et al.*, No. 6:11-CV-655, Dkt. No. 103 (E.D. Tex. Aug. 5, 2013) (Davis, J.) ("*PersonalWeb I*") (attached to Plaintiff's opening brief, Dkt. No. 85, at Ex. F), and that action also included Civil Actions No. 6:11-CV-656, -657, -658, -660, -683, and 6:12-CV-658, -660, -662.

II. LEGAL PRINCIPLES

It is understood that "[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

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This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier

observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office ("PTO") understood the patent. *Id.* at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; *see Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that "a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation").

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes.

Phillips, 415 F.3d at 1319-24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

In general, prior claim construction proceedings involving the same patents-in-suit are "entitled to reasoned deference under the broad principals of *stare decisis* and the goals articulated by the Supreme Court in *Markman*, even though *stare decisis* may not be applicable *per se*." *Maurice Mitchell Innovations, LP v. Intel Corp.*, No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006) (Davis, J.); *see TQP Development, LLC v. Inuit Inc.*, No. 2:12-CV-180, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J.) ("[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so."); *see also Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 839-40 (2015) ("prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority") (citation omitted); *Markman*, 517 U.S. at 390 ("[W]e see the importance of

uniformity in the treatment of a given patent as an independent reason to allocate all issues of claim construction to the court.").

The Court nonetheless conducts an independent evaluation during claim construction proceedings. *See, e.g., Texas Instruments, Inc. v. Linear Techs. Corp.*, 182 F. Supp. 2d 580, 589-90 (E.D. Tex. 2002); *Burns, Morris & Stewart Ltd. P'ship v. Masonite Int'l Corp.*, 401 F. Supp. 2d 692, 697 (E.D. Tex. 2005); *Negotiated Data Solutions, Inc. v. Apple, Inc.*, No. 2:11-CV-390, 2012 WL 6494240, at *5 (E.D. Tex. Dec. 13, 2012).

III. CONSTRUCTION OF AGREED TERMS

The Court hereby adopts the following agreed constructions:

Term	Agreed Construction
"data identifier" ('280 Patent, Claim 1)	"an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique"
"data file" ('280 Patent, Claim 1; '442 Patent, Claims 1, 2, 4, 7, 23, 30)	"a named data item(s)"
"content-based name" ('310 Patent, Claims 1, 8, 11, 18)	"an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique"
"digital identifier" ('420 Patent, Claim 166)	"an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique"

(Dkt. No. 78, Nov. 18, 2015 Joint Claim Construction and Prehearing Statement, at Ex. A; Dkt. No. 98, Feb. 24, 2016 Joint Claim Construction Chart, at Ex. A.)

IV. CONSTRUCTION OF DISPUTED TERMS

A. "data item"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
"sequence of bits"	"a sequence of bits distinct from contextual information"

(Dkt. No. 78, Ex. B, at 1; Dkt. No. 85, at 2; Dkt. No. 90, at 2; Dkt. No. 94, at 1; *see* Dkt. No. 98, at Ex. A.) The parties have submitted that this term appears in Claim 1 of the '280 Patent, Claims 1, 2, 7, 8, 10, 11, 14, and 16-19 of the '310 Patent, and Claim 166 of the '420 Patent. (Dkt. No. 78, Ex. B, at 1.)

The Court previously construed this term to mean "sequence of bits." *See PersonalWeb I* at 8-10.

(1) The Parties' Positions

Plaintiff argues that its proposed construction "is the definition provided by the specification." (Dkt. No. 85, at 2 (citing '791 Patent at 1:54-60).) Plaintiff also urges that Defendants' proposal should be rejected because "the specification refers to 'context' when discussing *naming or identifying* 'data items,' and not in relation to the 'data item' itself." (Dkt. No. 85, at 4.) "Finally," Plaintiff argues, "there is nothing in the specification or claims that precludes so-called 'contextual information' from being a 'data item' itself." (*Id.*, at 5.)

Defendants respond that "a patentee's attempt to act as his own lexicographer cannot be read in a vacuum." (Dkt. No. 90, at 5.) Defendants urge that "[t]hroughout the specifications' disclosure of each embodiment, 'context' is always distinguished from the 'data' in a 'data item.'" (*Id.*, at 3.) Defendants also cite arguments made by Plaintiff during prosecution as well as in *Inter Partes* Review ("IPR") proceedings. (*Id.*, at 3-4.) Defendants conclude:

> No one disputes that data is comprised of bits. The critical distinction the
> specification makes, and that [Plaintiff] now ignores, is that only certain bits

(content) make up a "data item" while other bits (context) are expressly left out. A construction of "sequence of bits" would entirely gloss over this key point.

(*Id.*, at 5.) Further, Defendants submit that in *PersonalWeb I*, "no party raised the issue of whether contextual information may be part of a 'data item,'" and *PersonalWeb I* was decided prior to Plaintiff's statements in the IPR proceedings. (*Id.*, at 6.) Finally, Defendants argue that Plaintiff's proposed interpretation "would also read out preferred embodiments." (*Id.*, at 7.)

Plaintiff replies by reiterating that the patentee's lexicography should govern, and Plaintiff urges that "[t]he Court's prior construction of the same term is entitled to substantial deference." (Dkt. No. 94, at 1.) Plaintiff also argues that "how the invention *identifies* 'data items' has nothing to do with what 'data items' *are*." (*Id.*, at 2.) Plaintiff explains that "just because a True Name can identify a data item independent of its contextual information does not mean that the data item itself must *exclude* (or be distinct from) contextual information—the entire point of the invention is that any bits can make up the data item and its True Name alone can identify it." (*Id.*) Further, Plaintiff argues that the Defendants' citations to Plaintiff's IPR arguments are misleading and incomplete. (*See id.*, at 2-3.)

(2) Analysis

Claim 1 of the '310 Patent, for example, recites (emphasis added):

1. A computer-implemented method in a system which includes a network of computers, the method implemented at least in part by hardware comprising at least one processor, the method comprising the steps:
      (a) at a first computer, obtaining a content-based name for a particular *data item* from a second computer distinct from the first computer, the content-based name being based at least in part on a function of at least some of the data which comprise the contents of the particular *data item*, wherein the function comprises a message digest function or a hash function, and wherein two identical *data items* will have the same content-based name; and
      (b) by hardware in combination with software, a processor at said first computer ascertaining whether or not the content-based name for the particular *data item* corresponds to an entry in a database comprising a plurality of identifiers; and

(c) based at least in part on said ascertaining in (b), determining whether or not access to the particular *data item* is authorized.

The specification discloses:

> *In general, the terms "data" and "data item" as used herein refer to sequences of bits.* Thus a data item may be the contents of a file, a portion of a file, a page in memory, an object in an object-oriented program, a digital message, a digital scanned image, a part of a video or audio signal, or any other entity which can be represented by a sequence of bits. The term "data processing" herein refers to the processing of data items, and is sometimes dependent on the type of data item being processed. For example, a data processor for a digital image may differ from a data processor for an audio signal.

> *In all of the prior data processing systems the names or identifiers provided to identify data items* (the data items being files, directories, records in the database, objects in object-oriented programming, locations in memory or on a physical device, or the like) *are always defined relative to a specific context.* For instance, the file identified by a particular file name can only be determined when the directory containing the file (the context) is known. The file identified by a pathname can be determined only when the file system (context) is known. Similarly, the addresses in a process address space, the keys in a database table, or domain names on a global computer network such as the Internet are meaningful only because they are specified relative to a context.

'791 Patent at 1:54-2:11 (emphasis added); *see id.* at 3:15-20 ("without relying on any context information or properties of the data item") & 3:30-35 ("identity of the data item depends on all of the data in the data item and only on the data in the data item" and "is independent of its name, origin, location, address, or other information not derivable directly from the data, and depends only on the data itself"); *see also id.* at 35:34-37.

"When a patentee explicitly defines a claim term in the patent specification, the patentee's definition controls." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (citing *Phillips*, 415 F.3d at 1321); *see Intellicall*, 952 F.2d at 1388; *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning,

as long as the special definition of the term is clearly stated in the patent specification or file history.").

The Court in *PersonalWeb I* found that "[t]he specification plainly and unambiguously states that a data item is a sequence of bits." *PersonalWeb I* at 9.

After *PersonalWeb I*, during a final hearing in IPR proceedings involving the '791 Patent and the '280 Patent, Plaintiff argued:

> [Counsel]: The content of the data item are whatever is in the data item, whatever bits make up the data item, that's the contents of the data item.
>
> JUDGE CHANG: But he does say independent of the name, date and properties of the data item. So --
>
> [Counsel]: That's because those things are not part of the data item. In the file that '791 was talking about, these patents, those things are not part of the data.

(Dkt. No. 90, Ex. 2, Apr. 15, 2014 Record of Oral Hearing, at 117:19-118:4; *see id.* at 115:7-15 ("[I]n the '791 patent they are talking about typical files where this metadata is not part of the file. It's not part of the data item.").)

> Likewise, during prosecution of the '791 Patent, the patentee stated:
>
> This invention relates to data processing systems and, more particularly, to data processing systems wherein data items are identified by substantially unique identifiers which depend on *all* of the data in the data items and *only* on the data in the data items.

(Dkt. No. 90, Ex. 3, Mar. 12, 1997 Amendment Under 37 C.F.R. 1.115, at 10-11 (PWEB 000737-38) (original bold shown as italics; original underlining and double-underlining omitted).)

These arguments by the patentee are consistent with the above-quoted disclosures in the specification as well as others. (*See* Dkt. No. 90, at 5 (citing '791 Patent at 1:65-3:35, 8:19-34, 14:40-50, 28:46-49, 31:58-63, 32:49-33:47, 35:29-37, & 38:33-40)).)

At first blush, the patentee has thus appeared to limit the scope of "data item" in the manner proposed here by Defendants. *See, e.g., SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1203 (Fed. Cir. 2013) ("[T]he patentees in this case have, without express redefinition, disclaimed a potential embodiment from the ordinary scope of a claim term through clear, repeated, and consistent statements in the specification that describe how culturing with beads is different and distinct from culturing in three-dimensions.").

The specification demonstrates, however, that there is a distinction between data *about* data items and data *within* data items, and this distinction is consistent with the above-quoted statements made during prosecution and in the IPR final hearing:

> In operation, *data items* (for example, files, database records, messages, data segments, data blocks, *directories*, instances of object classes, and the like) *in a DP* [(data processing)] *system employing the present invention* are identified by substantially unique identifiers (True Names), the identifiers depending on all of the *data in the data items* and only on the *data in the data items*.

'791 Patent at 32:54-60 (emphasis added). These references to "data *in* the data items" implies that a "data item" can consist of more than merely the data within it. This disclosure also suggests that a "data item" can itself be contextual information, such as in the example of data items being "directories." *See id.*

Further, Defendants' argument that a "data item" cannot include contextual information is analogous to arguing that an "e-mail," for example, consists of only the text that was typed by the sender and does not include any of the other information that may be necessary for proper transmission of the e-mail.

Because the specification, as quoted above, refers to "data in the data items," a fair reading of the specification as a whole is that a "data item" may encompass more than its data contents. Likewise, in the IPR proceedings quoted above, Plaintiff's counsel referred to the

"contents of the data item." (Dkt. No. 90, Ex. 2, Apr. 15, 2014 Record of Oral Hearing, at 117:19-118:4; *see* Dkt. No. 90, Ex. 3, Mar. 12, 1997 Amendment Under 37 C.F.R. 1.115, at 22 (PWEB 000749) ("a data item A-1 is given a name (true name) A-2 by passing the data item through a function MD, where MD uses all of the *data in data item* A-1 and only the *data in data item* A-1 to determine the name A-2") (emphasis added); *see also id.*, at 10-11 (PWEB 000737-38) (quoted above).)

Based on the intrinsic record as a whole, the Court rejects Defendants' disclaimer arguments. *See Omega Eng'g v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added); *see also id.* at 1325-26 ("[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both *clear and unmistakable*") (emphasis added); *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004) ("Because the statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term . . . .").

The Court therefore hereby expressly rejects Defendants' proposed construction. This finding is consistent *PersonalWeb I* and the above-discussed intrinsic evidence as well as with the construction of the term "data item" in IPR proceedings as to the '791 Patent. (*See* Dkt. No. 94, Ex. 1, May 17, 2013 Decision, at 15 (construing "data item" to mean "sequence of bits"); *see also id.*, Ex. 2, May 15, 2014 Final Written Decision, at 6.)

The Court accordingly hereby construes **"data item"** to mean **"sequence of bits."**

B. "given function of the data [in the data item / data file]" and "applying a function to the contents of the corresponding file"

"given function of the data [in the data item / data file]" ('280 Patent, Claim 1; '442 Patent, Claims 1, 7)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"computation where the input is all of the data in the [data file / data item], and only the data in the [data file / data item]"
"applying a function to the contents of the corresponding file" ('442 Patent, Claim 23)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"performing a computation where the input is all of the data in the file, and only the data in the file"

(Dkt. No. 78, Ex. B, at 2 & 5-6; Dkt. No. 85, at 5; Dkt. No. 90, at 10; Dkt. No. 94, at 5; *see* Dkt. No. 98, at Ex. A.)

These terms were not addressed in *PersonalWeb I*.

(1) The Parties' Positions

Plaintiff argues that "the surrounding claim language of the phrases at issue makes them entirely unambiguous." (Dkt. No. 85, at 5.) Plaintiff also urges that Defendants' proposed constructions should be rejected because, in Claim 1 of the '280 Patent, "[t]he claim language . . . involving the data used by the given function may include 'contents of the particular data,' but may not necessarily be limited to only 'contents of the particular data' because the patentee's use of 'comprises' results in an open-ended limitation." (*Id.*, at 6.) Likewise, Plaintiff submits that Claim 23 of the '442 Patent uses the phrase "at least in part." (*Id.*) Further, Plaintiff argues

that Defendants' proposals of "computation" and "input" "introduce[] ambiguity to otherwise unambiguous claim language." (*Id.*)

Defendants respond by citing the parties' agreed-upon construction for "data identifier" and by reasoning that "[a]s the 'given function' determines the data identifier, the claim itself requires the 'given function' to operate on all of the data in the data item and only the data in the data item." (Dkt. No. 90, at 11.) Defendants also argue that "[t]he words 'computation' and 'input' are more readily understood to a juror than the concept of 'function.'" (*Id.*, at 11 n.3.) Further, Defendants urge that the specification and the prosecution history confirm that the claimed function cannot operate on contextual information. (*Id.*, at 11-13.)

Plaintiff replies by reiterating that "Defendants' proposed construction adds words not found in the claim language, *e.g.*, 'computation' and 'input,' which would introduce ambiguity to the otherwise unambiguous claim language." (Dkt. No. 94, at 5.) Further, Plaintiff argues:

> In claim 1 of the '280 patent, the data used by the given function may include "contents of the particular data," but the "contents" may include both user data and contextual data. Even if "contents" were limited to "user data" (which it does [*sic*, is] not), the patentee's use of "comprises" results in an open-ended limitation (*i.e.*, the data used may include contextual information as well). The "at least in part" language used in claim 23 of the '442 patent also is open-ended and allows for the "data" to include any bits—both contextual and user.

(*Id.*, at 6.)

(2) Analysis

Claims 1 and 23 of the '442 Patent, for example, recite (emphasis added):

> 1. In a system in which a plurality of files are distributed across a plurality of computers, a method comprising:
>   obtaining a name for a data file, the name being based at least in part on a *given function of the data, wherein the data used by the given function to determine the name comprises the contents of the data file*; and
>   in response to a request for the a [*sic*] data file, the request including at least the name of the particular file, causing a copy of the file to be provided from

a given one of the plurality of computers, wherein a copy of the requested file is
only provided to licensed parties.

* * *

23. A method comprising:

obtaining a list of file names, at least one file name for each of a plurality
of files, each of said file names having been determined, at least in part, by
applying a function to the contents of the corresponding file; and

using at least said list to determine whether unauthorized or unlicensed
copies of some of the plurality of data files are present on a particular computer.

The claims at issue, such as above-quoted Claims 1 and 23 of the '442 Patent, thus recite

using "*the* contents" of the data file. The surrounding claim language thus appears to itself

explain that all contents of the data file are used by the function.

Plaintiff urges that, in the phrase "wherein the data used by the given function to

determine the name comprises the contents of the data file" in above-quoted Claim 1, the word

"comprises" indicates that the data item identification may be based on additional information

rather than merely the data in the data item. *See, e.g., Vehicular Techs. Corp. v. Titan Wheel*

Int'l, Inc., 212 F.3d 1377, 1383 (Fed. Cir. 2000) ("A drafter uses the term 'comprising' to mean

'I claim at least what follows and potentially more.'").

During prosecution of the '791 Patent, however, the patentee emphasized that the

identification for a data item is generated by using *only* the data therein:

This invention relates to data processing systems and, more particularly, to data
processing systems wherein data items are identified by substantially unique
identifiers which depend on *all* of the data in the data items and *only* on the data
in the data items.

(Dkt. No. 90, Ex. 3, Mar. 12, 1997 Amendment Under 37 C.F.R. 1.115, at 10-11

(PWEB 000737-38) (original bold shown as italics; original underlining and double-underlining

omitted).) Indeed, the patentee distinguished the "Gramlich" prior art reference (United States

Patent No. 5,202,982) on this basis:

. . . Gramlich has two kinds of files, source files and database component files. "Each database component file contains information regarding the text contained in one source file." . . . Also, "A database component file is created for each source file." . . .

Gramlich's source files contain computer program source code, and his database component files contain information about the textual words (symbols) in the source files. * * *

Gramlich determines the name of the database component file using two things. First, Gramlich includes *the source code file name* in the database component file name *and* then Gramlich includes *a hash value* to make up the rest of the database component file name.

Thus, Gramlich determines a name of one data item (the database component file) using (a) the name of a different data item (the source code file), and (b) a hash value.

Note that Gramlich's source files are not identical to his database component files. However, even if they were identical, Gramlich would still not use *only the data in the data item* since he also uses the source filename to determine the database component file name.

(*Id.*, Ex. 4, Aug. 29, 1997 Amendment Under 37 C.F.R. 1.116, at 12-13 (PWEB 000775) (emphasis in original) (citations omitted).)

These statements by the patentee are consistent with the specification. *See* '791 Patent at 3:30-35 ("identity of the data item depends on all of the data in the data item and only on the data in the data item" and "is independent of its name, origin, location, address, or other information not derivable directly from the data, and depends only on the data itself"); *see also id.* at 32:54-56 ("the identifiers depending on all of the data in the data items and only on the data in the data items"); *id.* at 1:13-18 & 3:6-20; *see, e.g., LizardTech Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1343-44 (Fed. Cir. 2005) ("[I]t would be peculiar for the claims to cover prior art that suffers from precisely the same problems that the specification focuses on solving."); *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316-17 (Fed. Cir. 2015).

Thus, the definitive statements by the patentee during prosecution, particularly when read in light of the specification as a whole, should be given effect in the Court's construction. *See, e.g., Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed. Cir. 2011) ("The patentee is bound by representations made and actions that were taken in order to obtain the patent."); *Omega Eng'g*, 334 F.3d at 1324 ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution.").

Further, Defendants' proposal of "computation" is supported by the specification. *See, e,g.,* '791 Patent at 7:45-46 ("their True Names have not yet been computed"); *id.* at 12:55-60 ("A True Name is *computed using a function*, MD, which reduces a data block B of arbitrary length to a relatively small, fixed size identifier, the True Name of the data block, such that the True Name of the data block is virtually guaranteed to represent the data block B and only data block B.") (emphasis added); *id.* at 13:9 ("The *function* MD(B) must be efficiently *computed*.") (emphasis added); *id.* at 14:8 ("compute the MD function").

Finally, Defendants' interpretation is also consistent with the parties' agreed-upon construction for the term "data identifier" (quoted below) in Claim 1 of the '280 Patent. Claim 1 of the '280 Patent recites (emphasis added):

> 1. In a system in which a set of data files are distributed across a network of servers, at least some of the data files being cached versions of data files from a source server, wherein the source server is distinct from the servers in the network, a content delivery method comprising:
>   determining a data identifier for a particular data file on the source server, the data identifier being determined using a given function of the data, wherein *said data used by the given function to determine the data identifier comprises the contents of the particular data file*; and
>   responsive to a request for the particular data file, the request including at least the data identifier of the particular data file, providing the particular data file from a given one of the servers of the network of servers, said providing being based on the data identifier of the requested data item.

The parties have agreed that the "data identifier" that is "determined" in this claim is "an identity for a data item generated by processing *all* of the data in the data item, and *only* the data in the data item, through an algorithm that makes the identifier substantially unique." (Dkt. No. 78, at Ex. A (emphasis added).)[1] This context provides additional support for Defendants' interpretation as to this claim as well as to all of the other claims at issue. *See SightSound*, 809 F.3d at 1316 ("Where multiple patents derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.") (citation and internal quotation marks omitted); *see also Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349-50 (Fed. Cir. 2004).

The Court therefore hereby expressly rejects Plaintiff's argument that the use of the word "comprises" means that there is no limit as to whether the data item identification can be based on information other than the data in the data item. *See, e.g., Spectrum Int'l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1380 (Fed. Cir. 1998) ("'Comprising' is not a weasel word with which to abrogate claim limitations."); *Kustom Signals, Inc. v. Applied Concepts, Inc.*, 264 F.3d 1326, 1332 (Fed. Cir. 2001) ("The open-ended transition 'comprising' does not free the claim from its own limitations.") (citing *Spectrum*); *Trading Techs. Int'l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1354 (Fed. Cir. 2010) (citing *Spectrum*).

The Court therefore hereby construes the disputed terms as set forth in the following chart:

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[1] This is the construction that the Court reached in *PersonalWeb I*, and in that case Plaintiff proposed this construction with the exception of the concluding phrase "that makes the identifier substantially unique." *See PersonalWeb I* at 13-16.

Term	Construction
"given function of the data [in the data item / data file]"	**"computation where the input is all of the data in the [data file / data item], and only the data in the [data file / data item]"**
"applying a function to the contents of the corresponding file"	**"performing a computation where the input is all of the data in the file, and only the data in the file"**

C. "licensed" and "unlicensed"

"licensed" ('442 Pat., Cl. 1)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"valid rights to access content"
"unlicensed" ('442 Pat., Cls. 7, 23)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"invalid rights to access content"

(Dkt. No. 78, Ex. B, at 9; Dkt. No. 85, at 7; Dkt. No. 90, at 14; Dkt. No. 94, at 6; *see* Dkt. No. 98, at Ex. A.)

In *PersonalWeb I*, the Court addressed specific disputes between the parties and then found that the terms "require[d] no further construction." *PersonalWeb I* at 24-26.

(1) The Parties' Positions

Plaintiff argues that "'licensed' and 'unlicensed' as claimed in the '442 patent are plain without lending themselves to any ambiguity, and furthermore, the specification does not express or imply a narrower interpretation." (Dkt. No. 85, at 7.) Plaintiff also submits that "Defendants'

proposed construction remains confusing because it is superfluous and suffers from internal

redundancy." (*Id.*, at 8.)

Defendants respond:

"Refusing to provide access to a file" is one way in which the specification discloses that a "license" can be enforced, *see* '791 patent at 32:23-26, and so as disclosed in the specification "access" should be determined by whether or not a user is "licensed" or "unlicensed." [Plaintiff's] interpretation inverts this relationship and makes "licensed" and "unlicensed" dependent on access. This interpretation conflicts with the intrinsic record because it presumes that any and every user with access to a file has a license, and ultimately leads to contradictory results in the asserted claims.

(Dkt. No. 90, at 14-15.) Defendants also cite the specification and the prosecution history. (*See*

id., at 14-16.) Finally, Defendants argue that *PersonalWeb I* addressed different disputes that are

not presented here. (*Id.*, at 16-17.)

Plaintiff replies that "Defendants' proposal to modify the terms 'licensed' and

'unlicensed' by introducing the idea of 'valid' or 'invalid' access rights would only confuse the

otherwise plain meaning." (Dkt. No. 94, at 6.)

(2) Analysis

Claim 1 of the '442 Patent, for example, recites (emphasis added):

1. In a system in which a plurality of files are distributed across a plurality of computers, a method comprising:
        obtaining a name for a data file, the name being based at least in part on a given function of the data, wherein the data used by the given function to determine the name comprises the contents of the data file; and
        in response to a request for the a [*sic*] data file, the request including at least the name of the particular file, causing a copy of the file to be provided from a given one of the plurality of computers, wherein a copy of the requested file is only provided to *licensed* parties.

In *PersonalWeb I*, the Court found:

The parties have two distinct disputes regarding these terms. First, they debate whether the license must be to the content of a file or to the system as a whole.

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However, there is no need to resolve this dispute globally because all of the cited Claims reference a license to a file.

* * *

Second, the parties debate whether the licensed file must be "requested." This answer comes directly from the specification. The specification discloses an "audit" embodiment where license status is determined without a request for a specific file. '791 Patent, at 32:27-28.

PersonalWeb I at 25-26; *see id.* at 26 ("[W]hile a party must have a license to access a particular file, there is no restriction on precisely how that license grants access to the file.")

Here, Plaintiff has urged that "a user is 'licensed' or 'unlicensed' depending on whether the user has access to content." (Dkt. No. 85, at 8.) This issue was not addressed in *PersonalWeb I. See id.*

As to the prosecution history, during original prosecution of the '420 Patent the patentees argued that a disclosure of not providing access if not enough bandwidth is available did not "teach or in any way suggest[] selectively denying a request for a file based on any authorization . . . or based on whether or not the requesting party is licensed . . . ." (Dkt. No. 90, Ex. 7, Feb. 14, 2010 Response to Final Office Action, at 14 (PWEB 156228).)

During reexamination prosecution of the '442 Patent, in response to the examiner's argument that "[the] Hellman [reference] discloses . . . a copy of the requested file (i.e. software) is only provided to licensed parties," the patentee argued that "[i]n Hellman the software is provided to all parties. Hellman's users need to request authorization to use software that they already have." (*Id.*, Ex. 6, '442 Re-Examination File History, July 30, 2009 Response to Office Action in an Ex Parte Reexamination, at 13 (PWEB 115610).)

On balance, the prosecution history contains no definitive statements relevant to the parties' present dispute. *See Omega Eng'g*, 334 F.3d at 1324 ("As a basic principle of claim

interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added).

Nonetheless, the specification discloses a "license table 136" in which the field "licensee" is described as: "identity of a user authorized to have access to this object." '791 Patent at 12:6-7; *see id.* at 11:63-65 ("Each record 150 of the license table 136 records a relationship between a licensable data item and the user licensed to have access to it."). The specification also discusses licenses as referring to rights rather than merely access:

> *Enforcing use of valid licenses can be active* (for example, by refusing to provide access to a file without authorization) *or passive (for example, by creating a report of users who do not have proper authorization).*
>
> One possible way to perform license validation is to perform occasional audits of employee systems. The service described herein relies on True Names to support such an audit, as in the following steps:
>
> (A) For each licensed product, record in the license table 136 the True Name of key files in the product (that is, files which are required in order to use the product, and which do not occur in other products)[.] Typically, for a software product, this would include the main executable image and perhaps other major files such as clip-art, scripts, or online help. Also record the identity of each system which is authorized to have a copy of the file.
>
> (B) Occasionally, compare the contents of each user processor against the license table 136. For each True Name in the license table do the following:
>
> (i) Unless the user processor is authorized to have a copy of the file, confirm that the user processor does not have a copy of the file using the Locate True File mechanism.
>
> (ii) If the user processor is found to have a file that it is not authorized to have, record the user processor and True Name in a *license violation* table.

'791 Patent at 32:23-48 (emphasis added); *see id.* at 8:51-54 ("The license table (LT) 136 is a table identifying files, which may only be used by licensed users, in a manner independent of their name or location, and the users licensed to use them.").

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The claims are consistent with this interpretation of "licensed." *See* '442 Patent at Cls. 1 ("a copy of the requested file is only provided to licensed parties") & 23 ("determine whether unauthorized or unlicensed copies of some of the plurality of data files are present on a particular computer"). Further, Plaintiff acknowledged in its reply brief that "the plain and ordinary meaning of 'licensed' / 'unlicensed' refer [*sic*, refers] to having the *right* to access content." (Dkt. No. 94, at 6 (emphasis added) (citing '791 Patent at 12:6-7).)

Finally, as to Defendants' proposal of referring to "access," Defendants have not adequately justified constraining the scope to access rights as opposed to other types of rights, such as rights to use or rights to possess. *See* '791 Patent at 32:17-26. Instead, surrounding claim language provides sufficient context for understanding the rights at issue in each particular claim. *See, e.g.,* '442 Patent at Cl. 23 ("determine whether unauthorized or unlicensed copies of some of the plurality of data files *are present* on a particular computer") (emphasis added).

The Court therefore hereby construes the disputed terms as set forth in the following chart:

Term	Construction
"licensed"	**"valid rights to content"**
"unlicensed"	**"invalid rights to content"**

D. "authorized," "unauthorized," "authorization"

"authorized" ('310 Patent, Claims 1, 2, 16-19)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"compliant with a valid license"

"unauthorized" ('442 Patent, Claims 7, 23)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"non-compliant with a valid license"

"authorization" ('420 Patent, Claim 166)	
Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary. No construction necessary.	"compliance with a valid license"

(Dkt. No. 78, Ex. B, at 10; Dkt. No. 85, at 8; Dkt. No. 90, at 17; Dkt. No. 94, at 7; *see* Dkt. No. 98, at Ex. A.)

These terms were not addressed in *PersonalWeb I*.

(1) The Parties' Positions

Plaintiff argues: "As used in these claims, 'authorized,' 'unauthorized,' and 'authorization' are plain without any ambiguity. Nothing in the specification states or implies anything other than the plain and ordinary meaning for these terms." (Dkt. No. 85, at 9.) Plaintiff also submits that "Defendants' proposed construction consists of terms that are not found in the patent let alone the claims." (*Id.*)

Defendants respond that "[t]hroughout the specification, the term 'authorization' is based on whether use or access to content complies with a user's 'license' rights, or lack thereof." (Dkt. No. 90, at 17.) Defendants also argue that, during prosecution, the patentee repeatedly explained that, in Defendants' words, "'authorization' is an additional limitation beyond mere permission to access or provide data." (*Id.*, at 18-19.)

Plaintiff replies by reiterating its opening arguments and by submitting that "the patents nowhere use 'compliant,' 'non-compliant,' or 'compliance,'" and "'[v]alid license' while used in the patents are [*sic*, is] not recited in the asserted claims." (Dkt. No. 94, at 7.)

(2) Analysis

Claim 1 of the '310 Patent, for example, recites (emphasis added):

1. A computer-implemented method in a system which includes a network of computers, the method implemented at least in part by hardware comprising at least one processor, the method comprising the steps:
      (a) at a first computer, obtaining a content-based name for a particular data item from a second computer distinct from the first computer, the content-based name being based at least in part on a function of at least some of the data which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-based name; and
      (b) by hardware in combination with software, a processor at said first computer ascertaining whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers; and
      (c) based at least in part on said ascertaining in (b), determining whether or not access to the particular data item is *authorized*.

The parties' arguments as to these disputed terms are substantially the same as for the terms "licensed" and "unlicensed," which are addressed separately above.

The specification states that the disclosed "mechanism ensures that licensed files are not used by unauthorized parties," and the specification refers to "[e]nforcing use of valid licenses." '791 Patent at 32:18-19 & 32:23.

In IPR proceedings, Plaintiff stated that "the file history makes clear that a file access system that accesses data items is not the same as a system that determines whether such access is 'authorized'/'not authorized.'" (Dkt. No. 90, Ex. 8, Dec. 26, 2013 Patent Owner's Preliminary Response, at 18, 28 & 41; *id.*, Ex. 9, June 16, 2014 Patent Owner's Response Pursuant to 37 C.F.R. § 42.120, at 38.)

Also, during prosecution of the '442 Patent, the patentee stated that "in [the] Hellman [reference] the user already has the file and is merely requesting *authorization to use* that file." (*Id.*, Ex. 7, Feb. 14, 2010 Response to Final Office Action, at 14 (PWEB 156228) (emphasis in original).)   Likewise, during prosecution of the '420 Patent, the patentee stated that "[i]n Hellman's system software becomes authorized or licensed after it has been obtained."   (*Id.*, Ex. 11, May 19, 2009 Response to Non-Final Office Action, at 18 (PWEB 156335).)

The Court therefore reaches the same conclusions for substantially the same reasons as for the terms "licensed" and "unlicensed."   Defendants' proposal of the word "compliant" is sufficiently clear, particularly as used with reference to a license.   Defendants' proposal of "non-compliant" would tend to confuse and is therefore replaced with "not compliant."   Finally, as to Defendants' proposal that "authorization" means "compliance with a valid license," the Court removes the phrase "compliance with" because that phrase might be interpreted as requiring some (unspecified) action to be performed.   Instead, "authorization" merely refers to a valid license, and the surrounding claim language is consistent with such a reading. *See* '420 Patent at Cl. 166.

The Court accordingly hereby construes the disputed terms as set forth in the following chart:

Term	Construction
"authorized"	**"compliant with a valid license"**
"unauthorized"	**"not compliant with a valid license"**
"authorization"	**"a valid license"**

E. "file name"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary. No construction necessary. (The remainder of the claim language defines the term)	"identifier derived only from the context of a file" Defendants contend that claims 23, 27, 28, and 30 of the '442 patent are indefinite as properly construed.

(Dkt. No. 78, Ex. B, at 11; Dkt. No. 85, at 10; Dkt. No. 90, at 20; Dkt. No. 94, at 8; *see* Dkt. No. 98, at Ex. A.) The parties have submitted that this term appears in Claim 23 of the '442 Patent. (Dkt. No. 78, Ex. B, at 11.)

This term was not addressed in *PersonalWeb I*.

<u>(1) The Parties' Positions</u>

Plaintiff argues that "'file name' has a plain and ordinary meaning readily understood by a jury—quite simply, it is the name of a file," and "the surrounding claim language provides the complete context for how the name of the file is determined." (Dkt. No. 85, at 10.) Plaintiff urges that "[n]othing in the specification expressly or impliedly suggests a use of 'file name' in any way other than the name of a file." (*Id.*, at 10-11.) As to Defendants' proposal, Plaintiff argues:

> Defendants propose to define "file name" by how it is made, not by what it is. Even then, Defendants' construction is incorrect because it would limit the definition of "file name" to only one way of creating the file name, whereas the claim language expressly allows for potentially many ways to create a file name. In limiting "file name" to only one way of creating the file name, Defendants further err by adding terms that are not found in the claim language.

(*Id.*, at 11.)

Defendants respond that "[t]he specification explains that in all prior data processing systems, 'the names or identifiers provided to identify data items (the data items being files,

directories, records in the database, objects in object-oriented programming, locations in memory or on a physical device, or the like) are always defined relative of a specific *context*.'" (Dkt. No. 90, at 20 (quoting '442 Patent at 1:66-2:4).) Defendants submit that "the specification explicitly distinguishes the alleged invention, where identifiers for a data item are determined from the content of a data item, 'using only the data in the data item and not relying on any sort of context.'" (Dkt. No. 90, at 20 (quoting '442 Patent at 3:10-12).) Defendants also cite prosecution history. (Dkt. No. 90, at 21.) Defendants conclude that because Claim 23 of the '442 Patent recites a method in which "file names" are "determined, at least in part, by applying a function to the contents of the corresponding file," "claim 23 of the '442 patent, as well as dependent claims 27, 28, and 30, are indefinite." (*Id.*)

Plaintiff replies by reiterating that "Defendants' proposed construction would define 'file name' by how it is created in a manner that contradicts the manner in which the claim itself prescribes that the 'file name' be created," and "adopting Defendants' construction would make the language in claim 23 describing how the 'file name' is determined entirely superfluous." (Dkt. No. 94, at 8.) Further, Plaintiff argues, "Defendants cite the specification's discussion of prior art systems, not the invention." (*Id.*, at 8-9.) Finally, Plaintiff argues:

> The specification does not define "file name" as limited to user-provided names. To the contrary, the specification repeatedly refers to user-provided names as "contextual names." *See, e.g.*, '442, 2:4-6; 5:36-44. In contrast, the specification refers to content-based names as True Names. The specification uses [the] term "file name" more generically to refer to either "contextual names" or "True Names." Whenever the generic "file name" term is used, surrounding language always makes clear whether it is referring to a user-given contextual name or a content-based True Name. This is exactly what claim 23 does. Thus, in the context of claim 23, a skilled artisan would understand exactly what type of "file name" is within its scope—the content-based True Name—making the claim definite.

(Dkt. No. 94, at 9.)

<u>(2) Analysis</u>

Claims 23, 27, 28, and 30 of the '442 Patent recite (emphasis added):

23. A method comprising:
        obtaining a list of *file names*, at least one *file name* for each of a plurality of files, each of said *file names* having been determined, at least in part, by applying a function to the contents of the corresponding file; and
        using at least said list to determine whether unauthorized or unlicensed copies of some of the plurality of data files are present on a particular computer.

* * *

27. A method as in claim 23 wherein the function is a message digest function or a hash function.

28. A method as in claim 23 wherein the function is selected from the functions: MD4, MD5, and SHA.

* * *

30. A method as in claim 23 wherein the function produces a substantially unique value based on the data comprising the data file.

Defendants urge that a "file name" is based on context rather than on the data in a data file and, as a result, Claim 23 is internally inconsistent because the recital of "said file names having been determined, at least in part, by applying a function to the contents of the corresponding file" would thus require both using and *not* using the data in a data file to determine the file name.

The specification discloses:

[A] database management system may group data records (data items) into tables and then group these tables into database files (collections). The complete address of any data record can then be specified using the database *file name*, the table name, and the record number of that data record.

'791 Patent at 1:43-48 (emphasis added).

In all of the prior data processing systems the names or identifiers provided to identify data items (the data items being files, directories, records in the database, objects in object-oriented programming, locations in memory or on a physical

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device, or the like) are always defined relative to a specific context. For instance, the file identified by a particular *file name* can only be determined when the directory containing the file (the context) is known. The file identified by a pathname can be determined only when the file system (context) is known. Similarly, the addresses in a process address space, the keys in a database table, or domain names on a global computer network such as the Internet are meaningful only because they are specified relative to a context.

Id. at 1:65-2:11 (emphasis added).

Within a data processing system 100, the data may be organized to form a hierarchy of data storage elements, wherein lower level data storage elements are combined to form higher level elements. This hierarchy can consist of, for example, processors, file systems, regions, directories, data files, segments, and the like. For example, with reference to FIG. 2, the data items on a particular processor 102 may be organized or structured as a file system 116 which comprises regions 117, each of which comprises directories 118, each of which can contain other directories 118 or files 120. Each file 120 being made up of one or more data segments 122.

In a typical data processing system, some or all of these elements can be named by users given certain implementation specific naming conventions, the name (or pathname) of an element being relative to a context. In the context of a data processing system 100, a pathname is fully specified by a processor name, a filesystem name, a sequence of zero or more directory names identifying nested directories, and a final *file name*. (Usually the lowest level elements, in this case segments 122, cannot be named by users.)

Id. at 5:24-43 (emphasis added); *see id.* at Fig. 2.

Thus, although the specification discusses the general nature of file names, the specification does not state that file names must depend only upon context or that a file name for a data file cannot depend upon data in the data file.

Turning to the prosecution history, during prosecution of the '791 Patent the patentee stated that file names are not used to create a "unique identifier":

[C]laim 1 recites an apparatus, in a data processing system, the apparatus comprising identity means and existence means. The identity means determines, "for any of a plurality of data items in the system, a substantially unique identifier, said identifier depending on all of the data in the data item and only on the data in the data item."

Thus, in particular, the identifier does not depend on anything not in the data item. Specifically, the identifier does not depend on other data, not on other identifiers and not on other data items.

Further, the identifier depends on all, not just some, of the data in the data item.

So, for example, if the data item is a file in a file system (and even if the file has some other identifying name), the identity means determines the unique identifier for that file based on all of the data in the file and only on the data in that file. No other data is used to determine the unique identifier. *File names* or data from other files *are not used.*

(Dkt. No. 90, Ex. 3, Mar. 12, 1997 Amendment Under 37 C.F.R. 1.115, at 11 (PWEB 000738) (emphasis modified).)

Although this prosecution history emphasizes that a unique identifier depends upon the data in a data file and does not depend upon the name of the file in a file system, this prosecution history does not address whether a file name for a data file can depend upon data in the data file. In other words, this evidence does not preclude a file name from depending upon content as well as context.

In sum, Defendants have failed to identify adequate support in the intrinsic record for their proposal that a "file name" must be "derived only from the context of a file."

The Court therefore hereby rejects Defendants' proposed construction. Further, because Defendants' indefiniteness arguments depend upon their rejected construction, the Court hereby rejects Defendants' indefiniteness arguments. No further construction is necessary. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be)

required to construe every limitation present in a patent's asserted claims."); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *ActiveVideo Networks, Inc. v. Verizon Commcn's, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015).

The Court accordingly hereby construes **"file name"** to have its **plain meaning**.

F. "substantially unique value"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
No construction necessary for "substantially unique value." To the extent the court determines that a construction of the phrase is needed, it should have the same meaning as "substantially unique identifier": "an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique"	"an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique"

(Dkt. No. 78, Ex. B, at 12; Dkt. No. 85, at 13; Dkt. No. 90, at 23; *see* Dkt. No. 98, at Ex. A.) The parties have submitted that this term appears in Claim 30 of the '442 Patent. (Dkt. No. 78, Ex. B, at 12.)

This term was not addressed in *PersonalWeb I*, but the Court there construed the similar term "substantially unique identifier" to mean "an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique." *PersonalWeb I* at 13-16.

Plaintiff here has argued that this term "is plain without lending itself to any ambiguity, and the specification does not provide or imply a narrower interpretation." (Dkt. No. 85, at 13.)

Plaintiff has urged that "[i]ntroducing verbosity with words not found in the claim language as Defendants propose renders the claim redundant, confusing, and potentially inaccurate." (*Id.*) Alternatively, Plaintiff has proposed that the Court construe "substantially unique value" to have the same construction that the Court found for "substantially unique identifier" in *PersonalWeb I*. (*Id.*, at 14.)

Defendants responded that "[Plaintiff] cannot circumvent the construction of a claim limitation because it finds plain and ordinary meaning in its subpart terms." (Dkt. No. 90, at 24.)

Plaintiff replied: "Defendants rely on Judge Davis's prior Markman Order [(*PersonalWeb I*)] and propose that this term should have the same meaning as how Judge Davis construed 'substantially unique identifier.' Dkt. 90 at 24. [Plaintiff] agrees to the construction of 'substantially unique value' as 'an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique.'" (Dkt. No. 94, at 10 n.2.)

The Court therefore hereby construes **"substantially unique value"** to mean **"an identity for a data item generated by processing all of the data in the data item, and only the data in the data item, through an algorithm that makes the identifier substantially unique."**

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

So Ordered this

Mar 10, 2016

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RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE